## HELIOPHYSICS Postdoctoral Fellowship Program





Applications are invited to a new postdoctoral fellowship program designed to train the next generation of researchers in the emerging field of Heliophysics. The program is sponsored by the NASA Living With a Star (LWS) program and administered by the UCAR Visiting Scientist Programs office.

Heliophysics embraces all science aspects of the Sun-Earth connection, and includes many of the basic physical processes that are found in our solar system, the laboratory, and throughout the universe. These processes generally involve the interactions of ionized gases (plasmas) with gravitational and electro-magnetic (both radiation and DC) fields, and with neutral matter. The physical domain of interest ranges from deep inside the Sun to the Earth's upper atmosphere, to the magnetospheres of the other planets, and extends out to the boundary between the solar wind and interstellar medium. Within this broad science discipline, LWS is a program designed to develop the scientific understanding required for the Nation to address effectively those aspects of the Sun-Earth system that affect life and society. Detailed information on LWS, its science interests, programmatic structure, and space missions can be found at: http://lws.gsfc.nasa.gov.

Two major topics of focus for LWS are the science of space weather and of the Sun-climate connection. Preference will be given to applicants whose proposed research addresses one of these two foci; but any research program relevant to LWS will be considered. Since the goal of the LWS postdoctoral program is to train Sun-Earth system researchers, preference will also be given to research projects that cross the traditional Heliophysics subdomains of the Sun, heliosphere, magnetosphere, and ionosphere/upper atmosphere.

In order to succeed at such cross-disciplinary research, the host institution and the mentoring scientists(s) will play critical roles. Consequently, applicants must select a host institution, which must be different than the candidate's PhD institution, and coordinate a joint application with the host scientist and institution. Potential host scientists are required to submit letters of intent and vitaes as part of the selection process. Hosts are expected to mentor the fellow, provide a reasonable office environment, a workstation, and any other unique research costs associated with this fellowship. To assist possible applicants, a list of possible hosts may be found at: <a href="http://www.vsp.ucar.edu/HeliophysicsSummerSchool">http://www.vsp.ucar.edu/HeliophysicsSummerSchool</a>. Please note that this list is not exclusive. Any U.S. research institution, including universities, government centers, and profit or non-profit organizations may serve as a host institution.

Applicants to this postdoctoral program are expected to have had a PhD for no more than five years. A LWS steering committee selects the fellows. Additional details about this program, including the selection criteria used by the steering committee may be found at: http://www.vsp.ucar.edu/HeliophysicsSummerSchool.

Qualified scientists and hosts are encouraged to apply by sending the following materials to the UCAR Visiting Scientist Programs office:

## **Postdoctoral Applicants:**

- Cover letter identifying the name of this program
- CV including publication list
- Names/contact information of four professional references (one from thesis advisor, but not from potential host). See online reference requirements: http://www.vsp.edu
- PhD dissertation abstract, including title.
- Titled project description, not to exceed five pages including figures and appendices (minimum 12 pt. type size). Proposals must describe actual research project. Applicants are expected to coordinate closely with host in writing proposal.
- Statement of relevance to the NASA Living with a Star program, not to exceed one page.

## **Host Applicants:**

- Letter of intent to host applican t and plans for mentoring (2-page limit)
- CV including publications (1-page limit)
- List of current and pending research support

U.S. citizenship is not required for application to this Program, but the selected postdoctoral fellows must be hosted at a U.S. research institution. Appointed scientists are employees of UCAR. The two-year fellowships include a fixed annual salary and benefits: health & dental insurance, paid time off, paid holidays, mandatory participation in TIAA/CREF retirement fund, and life insurance. A relocation allowance is provided as well as an allowance for travel to scientific conferences and other support costs.

The deadline for applications is October 1, 2009.

Appointments will be announced in early December. Applications must be submitted in electronic form and preferably .pdf, via email attachments sent to vspapply.ucar.edu. Reference letters should also be sent electronically, but we will accept hard copy or fax. If unable to send electronically, send the old fashioned way to: UCAR Visiting Scientist Programs, P.O. Box 3000, Boulder, CO 80307-3000 USA

Need more information? Call 303-497-8649, email: vspapply@ucar.edu, or visit website: http://www.vsp.ucar.edu

NASA Living With a Star, Heliophysics Division sponsors this program. UCAR is an EE/AAE who values and encourages diversity in the workplace.

